

Title (en)

A DISPOSABLE AIR FILTER UNIT, AN AIR CLEANER ASSEMBLY AND AN AIR CLEANER ARRANGEMENT

Title (de)

WEGWERFBARE LUFTFILTEREINHEIT, LUFTREINIGUNGSANORDNUNG UND LUFTREINIGUNGSVORRICHTUNG

Title (fr)

UNITÉ FILTRE À AIR JETABLE, ENSEMBLE ÉPURATEUR D'AIR ET AGENCEMENT D'ÉPURATEUR D'AIR

Publication

EP 3801820 B1 20220803 (EN)

Application

EP 18732698 A 20180611

Priority

EP 2018065385 W 20180611

Abstract (en)

[origin: WO2019238212A1] The present invention relates to a disposable air filter unit (100) for filtering air intake to an internal combustion engine in a vehicle, the air filter unit (100) forming a cylindrical sleeve about a central axis (X) forming an outer sleeve surface (104) for receiving unfiltered air, and an inner sleeve surface (105) for output of filtered air, the disposable air filter unit comprising a pleated filter component (100a) the air filter unit being further comprising at least one bioplastic reinforcement structure (100b) arranged at the pleated filter component (100a). The present invention also relates to an air cleaner assembly (300) for an air cleaner arrangement in a vehicle, comprising a disposable air filter unit (100) and a reusable carrier structure (200) to which said air filter unit (100) is removably arranged, the disposable air filter unit (100) forming a sleeve about a central axis (X), extending axially between a first end surface (102) and a second end surface (103), and forming an outer sleeve surface (104) for receiving unfiltered air, and an inner sleeve surface (105) for output of filtered air, characterised by the reusable carrier structure (200) comprising a receiving member (201) for receiving said first end surface (102) of the air filter unit (100), and a sealing member (204) arranged at the receiving member (201), to contact said first end surface (102) of the air filter unit (100).

IPC 8 full level

B01D 46/00 (2022.01); **B01D 46/24** (2006.01); **B01D 46/52** (2006.01)

CPC (source: EP US)

B01D 46/0005 (2013.01 - EP US); **B01D 46/2411** (2013.01 - EP); **B01D 46/2414** (2013.01 - EP US); **B01D 46/521** (2013.01 - EP US); **B01D 46/88** (2022.01 - US); **F02M 35/0201** (2013.01 - US); **F02M 35/0245** (2013.01 - US); **B01D 2271/022** (2013.01 - EP US); **B01D 2279/60** (2013.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2019238212 A1 20191219; CN 112512662 A 20210316; CN 112512662 B 20220930; EP 3801820 A1 20210414; EP 3801820 B1 20220803; US 11969685 B2 20240430; US 2021260515 A1 20210826

DOCDB simple family (application)

EP 2018065385 W 20180611; CN 201880094389 A 20180611; EP 18732698 A 20180611; US 201817251225 A 20180611